

Resource Estimate Development - PROC2040

Scope

This process defines how resource estimates are to be developed by the Project Delivery Team (PDT) in P3e to develop the total project cost estimate. **A**ccurate resource estimates must be made for all project activities, in order to establish a viable project plan. Program and project managers rely on these estimates to represent funding requirements to our customers. Resource providers use rollups of project resource estimates to assist in determining staffing requirements and balancing workload. Every work activity that requires an expenditure or resources must be included to the lowest level product of the WBS. At minimum, this is the lowest organizational level for current phase or to CFY+2 (whichever timeframe is longer), and Technical Division level beyond that point. If greater detail is available, it should be used.

Policy

ER 5-1-11, U. S. Army Corps of Engineers Business Process

[\[http://www.usace.army.mil/inet/usace-docs/eng-regs/er5-1-11/entire.pdf\]](http://www.usace.army.mil/inet/usace-docs/eng-regs/er5-1-11/entire.pdf)

Responsibility

The Project Manager (PM) is responsible for ensuring the further development of the **project** scope, initial schedule and resource estimates necessary to accomplish assigned activities, organized in accordance with the Work Breakdown Structure (WBS).

The Project Delivery Team (PDT) is responsible for

- **D**eveloping time and cost estimates necessary to perform the work defined by the Work Breakdown Structure (WBS) with assistance from the Resource Provider if needed
- Identifying conflicts with commitments to other projects via the workload distributions for their organizations

The Resource Provider(s) is responsible for

- Identifying **and resolving** conflicts with commitments to other projects via the workload distributions for their organizations.
- Coordinating with the PM/PgM and participating in District/Center Workload Analysis and Resource Leveling PROC1020[PROC1020] activities.

Distribution

Deputy District Engineer for Programs & Project Management (DPM)

Project Delivery Team (PDT)*

Project Manager (PM)*

Resource Provider(s)

Ownership

The BP/P2 Configuration Manager is responsible for ensuring that this document is necessary, that it reflects actual practice, and that it supports corporate policy.

System References

Acronyms and Glossary – REF8000[REF8000]

Change Management – PROC3010[PROC3010]

Change Management Plan – REF8009[REF8009]

Civil Works Program-Specific Information – REF8010[REF8010]

District/Center Workload Analysis and Resource Leveling – PROC1020[PROC1020]

Environmental Program-Specific Information – REF8012[REF8012]

Interagency and International Services (SFO) Program-Specific Information – PROC8017[PROC8017]

Military Program-Specific Information – REF8011[REF8011]

P3e User Guide[<http://www.hnd.usace.army.mil/p2/tutor/p3e/p3euserguide.pdf>]

PMP/PgMP Content – REF8005[REF8005]

PMP/PgMP Development – PROC2000[PROC2000]

Project Delivery Acquisition Strategy – PROC2050[PROC2050]

Regional Business Center Workload Analysis and Resource Leveling – PROC6003[PROC6003]

Research and Development Program-Specific Information – REF8013[REF8013]

Work Acceptance – PROC1000[PROC1000]

Activity Preface

This process is performed during the development or modification of the PMP, and whenever a change in scope or schedule is required (refer to *Change Management Plan – REF8009[REF8009]*). The development of the resource estimate is one of the most critical activities undertaken by the PDT. In developing the resource estimate, the PDT will be establishing the manner in which they want to manage and report on project product development including the one-to-one and one-to-many relationships (financial, organizational, and product) that will exist between P2 and CEFMS. P2 will generate PR&C information for CEFMS in accordance with these relationships and the level of detail contained in the resource estimate. The PDT will **carefully** develop resource estimates to ensure they are establishing the P2/CEFMS relationships that will allow them to obtain financial management data needed by the PDT, and give them the ability to manage the project using earned value capabilities of P2.

During development of the resource estimate, it is important to include all future fiscal year requirements, in accordance with the information contained in PMP/PgMP Content – REF8005[REF8005]. This will improve resource providers' capability to develop future staffing and contract needs and initiate appropriate action to meet these needs, in accordance with District/Center Workload Analysis and Resource Leveling – PROC1020[PROC1020] and Regional Business Center Workload Analysis and Resource Leveling – PROC6003[PROC6003].

During the execution of projects, many day-to-day issues need to be decided regarding distribution of in-house and contract resources between projects and the resulting potential impacts on individual project schedules and costs. USACE **Activities** will address these day-to-day issues corporately and are encouraged to form Middle Management teams to accomplish this effort in supporting PDTs.

Upon completion of this process, you will return to PMP/PgMP Development – PROC2000[PROC2000].

Project Manager (PM)

1. Open the Project in P3e.

Project Delivery Team (PDT)

2. Create or revise resource estimate at the lowest organizational level in P3e.

Use the lowest organizational level for current phase or to CFY+2 (whichever timeframe is longer), and Technical Division level beyond that point. If greater detail is available, it should be used.

Every activity in the project that requires an expenditure or resource must be included to the lowest level of the WBS. Ensure estimates are included to cover direct charges of administrative support and supervision.

All resourcing must be done at least to the lowest organizational level, but may be to the individual level, if desired.

The sum of resource estimates entered into P3e is the project cost estimate, since total resource estimates include all project activities that will be directly or indirectly charged against the project. The **resource estimates** must be entered by activity and identified by resource type (such as labor, contract, etc.) and unit of measure (hours, job, etc.), rather than as a lump sum. This process is critical, since this cost estimate can become the Baseline for performance measurement. This baseline may be revised as required during the project's life cycle. Refer to Change Management Plan – REF8009[REF8009].

Refer to PMP/PgMP Content – REF8005[REF8005], as well as Civil Works Program-Specific Information – REF8010[REF8010], Environmental Program-Specific Information – REF8012[REF8012], Interagency and International Services (SFO) Program-Specific Information – PROC8017[PROC8017], Military Program-Specific Information –

REF8011[REF8011], or Research and Development Program-Specific Information – REF8013[REF8013], as appropriate.

3. Evaluate project activities and resources to determine those that will be considered for contract or execution by other government and non-government entities.

The decision to outsource work involves the who, why, how, when, what, and how much to procure. Other considerations are customer requirements, quality management plans, and identified risk.

The PDT works in conjunction with Resource Provider(s)/Middle Management Team to accomplish this.

If resource estimate includes contract, stop and complete Project Delivery Acquisition Strategy – PROC2050[PROC2050]. Otherwise, goto task #4.

4. Revise resource estimate as necessary in P3e.
5. **Determine if there is PDT consensus on resource estimate.**
If there is consensus, goto task #20. Otherwise, goto task #6.
6. **Provide resource estimate to Resource Providers.**

Resource Providers

7. **Review resource estimate and recommend alternatives to PDT.**

Project Delivery Team (PDT)

8. **Evaluate alternatives and develop revised resource estimate.**
9. **Determine if there is PDT consensus on resource estimate.**
If there is consensus, goto task #20. Otherwise, goto task #10.
10. **Provide resource estimate to Middle Management Team.**

Middle Management Team

11. **Review resource estimate and recommend alternatives to PDT.**

Project Delivery Team (PDT)

12. **Evaluate alternatives and develop revised resource estimate.**
13. **Determine if there is PDT consensus on resource estimate.**

If there is consensus, goto task #20. Otherwise, goto task #14.

14. Provide resource estimate to PRB.

Project Review Board (PRB)

15. Review resource estimate and recommend alternatives to PDT.

Project Delivery Team (PDT)

16. Evaluate alternatives and develop revised resource estimate.

17. Determine if there is PDT consensus on resource estimate.

If there is consensus, goto task #20. Otherwise, goto task #18.

18. Provide resource estimate and alternatives to Commander.

Commander

19. Review resource estimate and alternatives and provide solution to PDT.

Project Delivery Team (PDT)

20. Finalize resource estimate in P3e.

End of activity.



